A NEW SPECIES OF SWELTSA FROM WEST VIRGINIA (PLECOPTERA: CHLOROPERLIDAE)¹

Ralph F. Kirchner^{2,3}, Boris C. Kondratieff⁴

ABSTRACT: Sweltsa pocahontas, n. sp. is described from Braxton and Pocahontas County, West Virginia. This species resembles S. unicae (Ricker) in the structural details of the male epiproct and both species are illustrated. A holotype male and five paratype males are designated.

The Nearctic Sweltsa includes 21 species, of which five are eastern in distribution (Surdick 1985). Collecting by the authors has revealed an undescribed species from the Allegheny Mountain section of West Virginia.

Sweltsa pocahontas, new species Figs. 1-3.

Male.- Body length 8.5-9.0 mm. Length of forewing 8.0 mm. General body color straw yellow in life (yellow-white in alcohol). Pronotum with black margin and center stripe. Middorsal region of abdominal terga 1-8 each with black mark. Terga 9 with transverse ridge. Epiproct erectile in cup-like basal anchor, elongate and nearly parallel sided dorsally (Fig. 2); tip hooked, recurved anteriorly, joining basal portion at acute angle, (Figs. 1 and 3).

Types.- Holotype Male, WEST VIRGINIA: Pocahontas County, Monongahela National Forest, Right Fork of Tea Creek, 0.4 miles N of WV 150, between Tea Creek Mountain and Gauley Mountain, elev. 1277 m, 16 VI 1983, R.F. Kirchner and B.C. Kondratieff. Paratypes: 3 males, same data as holotype; 2 males, Braxton County, small tributary to Falls Run, at Falls Mill, US 19, 11 V 1984, R.F. Kirchner.

The holotype and one paratype will be deposited in the collection of the United States Museum of Natural History, the remaining paratypes in the Kirchner Collection and Colorado State University Insect Collection.

Etymology: This species is named for the county in West Virginia where the holotype was collected.

ENT. NEWS 99(5): 233-236, November & December, 1988

Received June 20, 1988. Accepted August 4, 1988.

²Department of the Army, Huntington District Corps of Engineers, Water Quality Section, 502 8th Street, Huntington, West Virginia 25701.

³The views of the author do not purport to reflect the position of the Department of the Army or the Department of Defense.

⁴Colorado State University, Department of Entomology, Fort Collins, Colorado 80523.

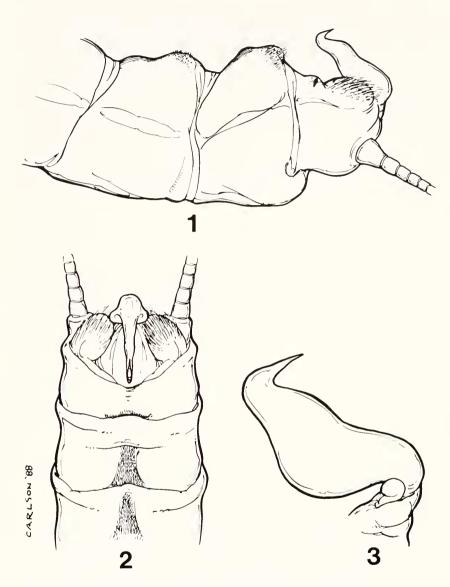


Figure 1. Sweltsa pocahontas, n. sp. Male terminalia, lateral. Figure 2. Male terminalia, dorsal. Figure 3. epiproct, lateral.

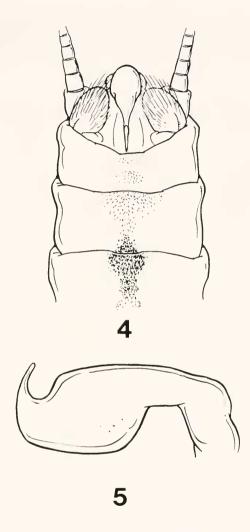


Figure 4. Sweltsa unicae (Grayson Co., Virginia) Male terminalia, dorsal. Figure 5. Epiproct, lateral.

Diagnosis.- The shape of the male epiproct easily distinguishes this species from its eastern Nearctic relatives: *S. lateralis* (Banks), *S. mediana* (Banks), *S. naica* (Provancher), *S. onkos* (Ricker), and *S. urticae* (Ricker). In lateral view, the epiproct is most similar to *S. urticae* (Fig. 5), but lacks the expanded basal section of the epiproct. Additionally, the tip of the epiproct is elongate in *S. pocahontas* and forms an acute angle in lateral view (Fig. 3) rather than U-shape as in *S. urticae* (Fig. 5). Females and nymphs collected in association with *S. pocahontas* could not be reliably distinguished from females and nymphs of *S. lateralis*.

Remarks: Both streams are crenon (spring runs) habitats that become intermittent. The dominant riparian vegetation varies from cove hardwoods to northern hardwoods intermixed with red spruce.

Other species of chloroperlids associated with Sweltsa pocahontas included S. lateralis, S. onkos, Alloperla usa Ricker, and Haploperla brevis (Banks).

ACKNOWLEDGMENTS

We thank Drs. Richard W. Baumann, Brigham Young University and Howard E. Evans, Colorado State University for prepublication reviews. Dave Carlson provided the illustrations.

LITERATURE CITED

Surdick, R.F. 1985. Nearctic genera of Chloroperlinae (Plecoptera: Chloroperlidae). Illinois Biol. Monog. 54: 1-146.